Marking Head Operations

1. Choose a machine to carry out the operation. Virtually any milling, turning, or drilling machines, either manual or CNC may be used.

2. Choose the marking text and follow the type setting instructions for seting up the marking tool.

3. The Marking Head is loaded in the machine's spindle or tool holding system (tool post or turret) then aligned and positioned on the work piece. See Orientation Instructions.

4. The Marking Head is immediatly ready for the piece needing to be marked.

5. The Marking Head is advanced into the work piece .500 (12.7 mm) charging and launching the inertia system, which triggers the movement of the marking head.

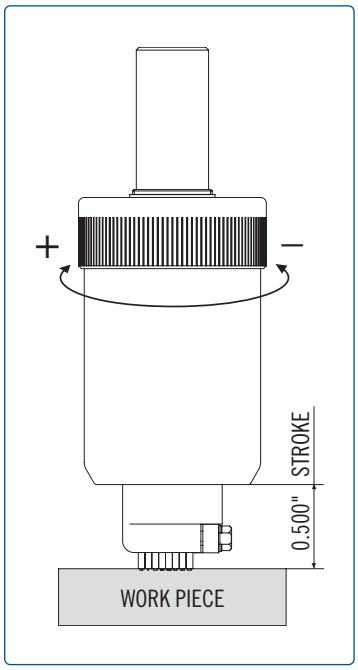
6. The force needed to charge the tool to the point of launching is the maximum of 265 lbs (120 kgs). At its highest setting using the standard springs supplied with the head.

7. The depth of the marking head is adjustable by the clockwise or counterclockwise rotation of the nut, which increases or decreases the depth for various materials and hardness.

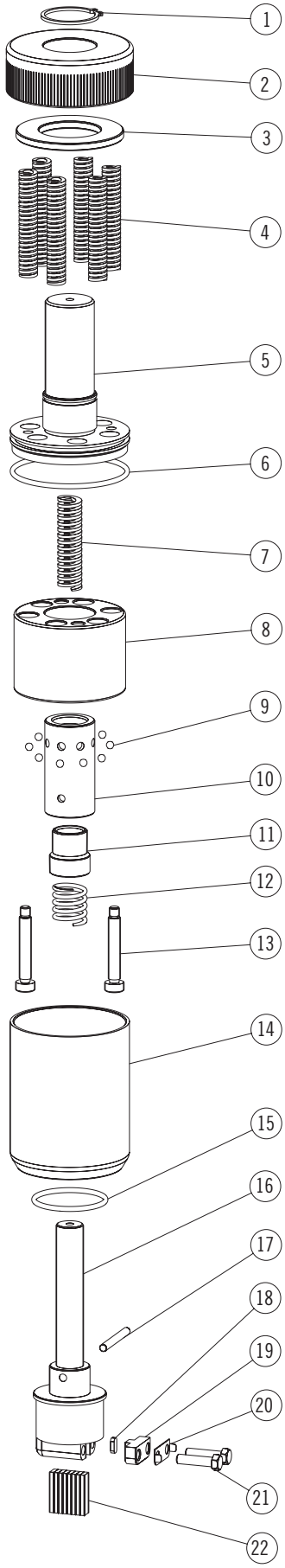
8. Depending on the material, marking depth may decrease as more characters are used and / larger character sizes are used because more marking force is required.

9. Depending on your application, you may wish to impact the mark a second time for greater impression.

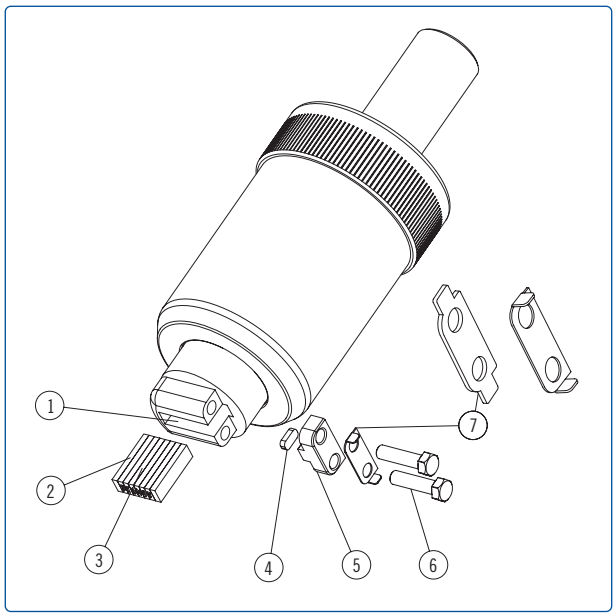
10. In top of the shank there is an hole used to drain possible condense or coolant inside the head.



Pos	Description	Part No.	Q.
1	Lock Ring WR28	5023100022	1
2	Preloading Nut	4007100060	1
3	Spring Guide	4000500040	1
4	Spring CXF 10x64	5071604006	6
5a	3/4 " Shank	4001000150	1
5b	1 " Shank	4001000160	1
5c	Morse Taper 3	4001000180	1
6	O-Ring 3200	5030100064	1
7	Spring CXF 13x51	5071604013	1
8	Body	4011000050	1
9	Ball Bearings B4	5027400047	8
10	Outer Bushing	4002200080	1
11	Iner Bushing	4002200090	1
12	Spring	4010400010	1
13	Cap Screw	4018700020	2
14	Cover	4003800050	1
15	O-Ring 3137	5030100054	1
16	Shaft	4016200060	1
17	Dowel pin 4 x 36	5007410526	1
18	Elastic Insert	4012200110	1
19	Bracket	4001800070	1
20	Lock Plate	4013700010	1
21	Bolt	5002320541	2
22	Steel Type	50516	10



Type Setting for "TH" Type Holder Models



1. Place the steel types (3) in the type seat (1) in the mirror image of the desired mark.

2. It is important to centre the steel type (3) in the holder (1) to prevent undue wear on the marking head. This is easly accomplished with the use of the spacers (2) in conjunction with the bracket (5).

3. Do not over tighten the bolts (6), but leave a small space between the bracket (5) and the type holder (1) in order to leave the elastic insert (4) working.

4. Align the head of the bolts (6) to allow the ears of the lock plate (7) to be folded against the flats of the bolt heads for security. Extra lock plates are provided.

Orientation of Mark on Work Piece

The marking position can be set by the orientation of the straight shank of Morse Taper of the Marking Head as it is held in the machine.

Straight shank tools can be held in collet chucks, or endmill type holders. Clamp securely against the round shank with the type holder oriented in the desired position.

IMPORTANT: on machining centers, be sure machine spindle is locked in tool change orientation position when aligning the marking position.

Programming on CNC Machines

Simply rapid approach the surface of the work piece to .040 (1 mm) above part. Then advance against work piece .500 (12.7 mm) at maximum feed rate 75 in/min (2000 mm/min).

Example in millimeters
Assume Z0 is work piece surface.

M6T	Loading Marking Head in machine spindle
M19	Orient machine spindle
G90	Absolute movement
G0 X... Y...	Move to marking position
G0 Z 1.0	Rapid to 1mm above part
G1 Z -12.7 F2000	Feed 12.7mm at 2000 mm/min to mark work piece
G0 Z 5.0	Rapid away from the work piece

CAUTION: Do not program spindle rotation (M3 or M4)
Do not program coolant function (M8)